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10/598,029	08/16/2006	Kentaro Ryuh	70404.110/ok	9354
54072	7590	05/27/2010	EXAMINER	
SHARP KABUSHIKI KAISHA C/O KEATING & BENNETT, LLP 1800 Alexander Bell Drive SUITE 200 Reston, VA 20191				MOON, SEOKYUN
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## **DETAILED ACTION**

### ***Status of the Previously Presented Claims***

1. Claims 1 and 3-10 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nobuyoshi (JP Pub. No. 2001-117533) in view of Wakita (US 2002/0154077).

Claims 4 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nobuyoshi and Wakita, and further in view of Bada et al. (US 2002/0003522, herein after “*Bada*”).

Claims 6-8 and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nobuyoshi and Wakita, and further in view of Kwon et al. (US 6,360,149, herein after “*Kwon*”).

Claim 9 was rejected under 35 U.S.C. 103(a) as being unpatentable over Nobuyoshi and Wakita, and further in view of Morita (US 7,154,488).

### ***Response to Arguments***

2. The Applicants’ arguments filed April 20, 2010 have been fully considered.

Regarding the rejection of claim 1, the Applicants argue [Remarks: pg 8 1st full paragraph], “*Wakita teaches a special purpose display device with an unconventional liquid crystal display that includes different adjacent pixels A, B, as shown in Fig. 1 and discussed in paragraph [0034] of Wakita. Paragraphs [0038], [0042], and [0043] of Wakita further state*

*that the different adjacent pixels A, B are a normally white pixel, and a normally black pixel, respectively. Thus, in order for a display device to be able to use the frequency lowering technique taught by Wakita, The display device must include both normally white pixels and normally black pixels adjacently arranged in the same display device”* and assert [Remarks: pg 8 2<sup>nd</sup> full paragraph] that Nobuyoshi cannot be modified to perform the frequency lowering technique taught by Wakita because the display of Nobuyoshi does not and cannot include both of a normally white mode pixel and a normally black mode pixel.

Examiner respectfully disagrees.

Contrary to the Applicants' allegations, Examiner respectfully submits that nowhere in the Wakita reference discloses that having a normally white pixel (herein after “NW pixel”) and a normally black pixel (herein after ”NB pixel”) is a requirement for driving a display at two different frequencies. Examiner respectfully requests the Applicants either to cite the portion of the Wakita reference disclosing such subject matter or to explain how having a NW pixel and a NB pixel is a requirement for driving a display at two different frequencies. A NW pixel is merely a pixel which is white when no voltage is applied to and is black when a full voltage is applied to. A NB pixel is merely a pixel which is black when no voltage is applied to and is white when a full voltage is applied to. Thus, whether a pixel is a NW pixel or a NB pixel is not directly related to a vertical scanning frequency of a display. Accordingly, Examiner respectfully submits that having a NW pixel and a NB pixel is not a requirement for a display to be driven with two different vertical scanning frequencies.

The Applicants further argue [Remarks: pg 9 2<sup>nd</sup> full paragraph], “*Further, the Examiner has failed to provide a combination of references that teach or suggest the feature of “both the*

*first and second vertical scanning frequencies used to display still images on the first and second display sections are lower than both the first and second vertical scanning frequencies used to display moving images on the first and second display sections" as recited in Applicant's claim 1".*

Examiner respectfully disagrees.

Nobuyoshi teaches a driving circuitry capable of displaying still images and moving images on first and second display sections, using a first and second vertical scanning frequencies. Wakita teaches the concept of using a first frequency to display still images and a second frequency higher than the first frequency to display moving images. Thus, Nobuyoshi as modified by Wakita teaches the frequencies used to display the still images being lower than the frequencies used to display the moving images.

The Applicant lastly argues [Remarks: pg 9 3<sup>rd</sup> full paragraph], "*Instead of basing the conclusion of obviousness on actual teachings or suggestions of the prior art and the knowledge of one of ordinary skill in the art at the time of the invention was made, the Examiner has improperly used Applicants' own invention as a guide*".

Examiner respectfully disagrees.

Examiner respectfully submits that that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). Contrary to

the Applicants' above assertion, Examiner respectfully submits that one of ordinary skill in the art would clearly see the advantage of applying the teaching of Wakita to the display device of Nobuyoshi, which is reducing the vertical scanning frequency to reduce the power consumption of the device.

*Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEOKYUN MOON whose telephone number is (571)272-5552. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 572-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 20, 2010  
/Seokyun Moon/  
Examiner, Art Unit 2629

/Sumati Lefkowitz/  
Supervisory Patent Examiner, Art Unit 2629